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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,968

05/02/2006

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EXAMINER

HUR, ECE

ART UNIT

PAPER NUMBER

2179

MAIL DATE

DELIVERY MODE

02/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/577,968

Applicant(s)

MCCROSSAN ET AL.

Examiner

ECE HUR

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/09/2007, 05/02/2006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

This action is responsive to application filed on May 2, 2006 in which Claims 1 to 28 are presented for examination. This application is a 371 of PCT/ JP04/17215, filed on November 12, 2004. Applicant is claiming priority for the application 60/519,317 filed on November 12, 2003.

Status of Claims

Claims 1-28 are pending in the case. Claims 1, 13, 26, 27 and 28 are the independent Claims.

Claim 27 is rejected under 35 U.S.C. 101.

Claims 1-3, 5, 6, 10, 13-15, 17, 18, 22, 26-28 are rejected under 35 U.S.C. 102(b).

Claims 4, 7-9, 11-12, 16, 19-21 and 23-25 are rejected under 35 U.S.C. 103(a).

Information Disclosure Statement Acknowledgement

The information disclosure statement filed on August 9, 2007 and May 2, 2006 are in compliance with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been placed in the application file, the information referred to therein has been considered as to the merits.

Specification Objection

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is

requested in correcting any errors of which applicant may become aware in the specification.

Drawings Objection

Due to the lengthy specification the drawings has not been checked to the extend necessary to determine whether the drawings are comply with 37 CFR 1.84(p) (4) and (p) (5).

Abstract Objection

The abstract of the disclosure is objected to because the abstract is not on a separate sheet. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 27 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically directed towards Software per se.

Regarding Claim 27, Claim 27 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter and claiming "application program" and "computer program". Software is functional descriptive material that can be considered statutory only if it is both functional and clearly embodied on a computer readable medium and designed to support specific data manipulation function. When functional descriptive material is recorded on a computer-readable medium it will become structurally and functionally interrelated the medium and will be statutory in most cases since the use of technology permits the function of the descriptive material to be realized. See *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031, 1035 (Fed. Cir 1994) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQd at 1759. A Software structure is functional if the specific arrangement of data enables a computer to accomplish useful result arising from the arrangement of the data in the software. However, only computer

readable medium executed instruction by a processor could be statutory, it is not clearly defined as being embodied in a computer readable medium as executed instruction and is therefore not statutory. See Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 6, 10, 13-15, 17, 18, 22, 26-28 are rejected under 35

U.S.C. 102(b) as being anticipated by Kondo, EP 0886276.

Regarding Claim 1, Kondo discloses the claimed aspect of a recording medium having recorded thereon a video stream and a graphics stream, wherein: the video stream represents a moving picture made up of a plurality of pictures(FIG. 1); the graphic stream(FIG. 5, 400 Menu) is used for overlaying a multi-page menu on the moving picture(dynamic image, Columns 20-21, lines 1-8), and includes interactive control information(FIG. 5, Next) and graphics data(FIG. 5, listing of items 1-4) ; the graphics data is used for generating the multi-page menu(FIG. 5, Next takes the user to the next menu page); and the interactive control information includes time information used for controlling behavior of the multi-page menu in accordance with a playback proceeding of the video stream. (Kondo, Column 13-14, lines 54-56).

Regarding Claim 2, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1 for details. Kondo discloses the claimed aspect of the multi-page menu(FIG. 5, 400 Menu) includes a main page and a sub page(FIG. 5, next takes the user to the sub page); the multi-page menu behavior includes presentation of the main page in accordance with the playback proceeding of the video stream(FIG. 5); and the time information includes timing information showing a time(Columns 13, 14, effective time, start time and end time, lines 54-6) for presentation of the main page.

Regarding Claim 3, most of the limitations have been met in the rejection of Claim 2. See the rejection of Claim 2 for details. Kondo discloses the claimed aspect of the multi-page menu behavior includes presentation of the sub page(FIG. 5, 400 Menu) in accordance with the playback proceeding of the video stream; the main page includes a button material(FIG. 5, 400 Menu, buttons) for receiving a user operation instructing a playback apparatus to present the sub page(FIG. 5, Menu, Next provides the sub page); and the time information includes first timeout information showing a time for automatically(Columns 13, 14, effective time, start time and end time, lines 54-6) activating the button material.

Regarding Claim 5, most of the limitations have been met in the rejection of Claim 3. See the rejection of Claim 3 for details. Kondo discloses the claimed aspect of

the multi-page menu behavior includes removal of the on-screen sub page in accordance with the playback proceeding of the video stream; and the time information(Column 13, time duration, lines 55-57) includes second timeout(start time, end time of the effective time duration, Column 14, lines1-6) information showing a time for automatically removing the on-screen sub page(if the user is on the next page or selects one of the selections it is considered the subpage).

Regarding Claim 6, most of the limitations have been met in the rejection of Claim 2. See the rejection of Claim 2 for details. Kondo discloses the claimed aspect of the interactive control information is encapsulated in a packet(PCI packet 50, high light information(button information); the time information is a presentation time stamp attached to the packet(display or operation at a time); and a decoding time stamp attached to the packet shows a time for a playback apparatus to start decoding the interactive control information, wherein the high light information(button) is displayed to the user at a time.(Column 13, lines 50-53).

Regarding Claim 10, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1 for details. Kondo discloses the claimed aspect of the interactive control information includes stream model information; the stream model information shows whether the graphics stream recorded on the recording medium is

multiplexed with the video stream and to be supplied to a playback apparatus, (Kondo, Column 14, lines 27-34).

or "the graphics stream recoded on the recording medium is non-multiplexed with the video stream and to be preloaded to a memory of the playback apparatus; "

and the time information is valid only when the stream model information shows that the graphics stream is multiplexed with the video stream. (Kondo, Column 13-14, lines 54-56).

Regarding Claims 13-15, Kondo discloses the claimed aspect of playback apparatus, wherein reproducing apparatus is disclosed(FIG. 4, decoder, Track buffer(Column 19, line 11)). The rejection for Claims 1-3 apply to Claims 13-15. See rejection details for Claims 1-3.

Regarding Claims 17 and 18, most of the limitations have been met in the rejection of Claims 14, 15. See the rejection of Claims 14, 15 for details. Kondo discloses the claimed aspect of playback apparatus, wherein reproducing apparatus is disclosed(FIG. 4, decoder, Track buffer(Column 19, line 11)). The rejection for Claims 5-6 apply to Claims 17-18. See rejection details for Claims 5-6.

Regarding Claim 22, most of the limitations have been met in the rejection of Claim 13. See the rejection of Claim 13 for details. Kondo discloses the claimed aspect of playback apparatus, wherein reproducing apparatus is disclosed(FIG. 4, decoder,

Application/Control Number:
10/577,968
Art Unit: 2179

Page 9

Track buffer(Column 19, line 11)). The rejection for Claim 10 applies to Claim 22. See rejection details for Claim 10.

Regarding Claim 26, limitations have been met in the rejection of Claims 1 and 2. See rejection details for Claims 1 and 2.

Regarding Claim 27, Kondo discloses executable instruction to perform the claimed limitation. The rejection for Claim 1 applies to Claim 27. See the rejection details for Claim 1.

Regarding Claim 28, Kondo discloses the claimed aspect of decoder in FIG. 4. The rejection for Claim 1 applies to Claim 28. See the rejection details for Claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the

various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4, 7-9, 11-12, 16, 19-21 and 23-25 are rejected under 35 U.S.C. 103(a) as being obvious over Kondo, EP 0886276.

Regarding Claim 4, most of the limitations have been met in the rejection of Claim 3. See the rejection of Claim 3 for details. Kondo discloses the claimed aspect of interactive navigation between sub pages using the next button (FIG. 5, 400 Menu). Kondo does not disclose the claimed aspect of specifying a page number for the menu pages. However it would be obvious to one of ordinary skill in the art at the time of the invention to specify page numbers for menu pages, because it would provide more efficient navigation. " the interactive control information includes a navigation command for the playback apparatus to execute upon activation of the button material on the main page; and the navigation command includes a specification of a page of the multi-page menu to be presented and a specification of a button material to be presented in a selected state on the specified page".

Regarding Claim 7, most of the limitations have been met in the rejection of Claim 6. See the rejection of Claim 6 for details. Applicant should duly note that the transfer time and decoding duration time is included in the time stamp, otherwise it would not be possible to play the graphical information(main page). Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to consider the decoding and transferring time, because otherwise the display would not be possible. "a value of the presentation time stamp is calculated by adding a sum of a first duration value and a second duration value to a value of the decoding time stamp; the first duration is a longer one of a duration taken to decode the graphics data included in the graphics stream and a duration taken to clear a graphics plane; and the second duration is a duration taken to transfer a complete set of uncompressed graphics used for presentation of the main page".

Regarding Claim 9, most of the limitations have been met in the rejection of Claim 7. See the rejection of Claim 7 for details. Applicant should duly note the formula to determine the total size of uncompressed(decoded) data is obvious to one of ordinary skill in the art at the time at the time of invention. This formula is calculating the decoded data by taking in consideration of worst case, wherein the button is the largest and subtracting the decoded part.

$T(\text{size of uncompressed data, decoded data}) = TA(\text{total graphics size from normal state}) + a \text{ size } B(\text{largest button}) - a \text{ size } NB(\text{uncompressed, decoded, at normal state})$

Regarding Claim 11, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1 for details. Kondo discloses the claimed aspect multi-page menu includes a main page(FIG. 5, 400 Menu) and a sub page(FIG. 5, next or selection one the items provides the user the subpage); the behavior of the multi-page menu includes a presentation of the main page in accordance with the playback proceeding of the video stream(FIG. 4, Image; and the time information includes timing information showing a time(Columns 13, 14, effective time, start time and end time, lines 54-6) at which the main page becomes available for the on presentation.

Kondo does not disclose the claimed aspect of pop-up, however applying pop-up is well in the art at the time of the invention, because pop-up presentation is used widely and allows user to view different windows at the same time.

Regarding Claim 12, most of the limitations have been met in the rejection of Claim 11. See the rejection of Claim 11 for details. Kondo discloses the claimed aspect of the multi-page menu behavior includes removable of on-screen page presented by way of the pop-up(Fig. 5, 400 Menu(graphics is pop-up on the image, one instance)) on presentation and the time information includes timeout information showing a time for automatically removing all on-screen pages of the multi-page menu, wherein there is an

effective time duration information indicating an effective time during which a selection button displayed in a menu picture plane. (Columns 13-14, lines 54-6). However, Kondo does not teach the claimed aspect of multiple pop-up pages. It would be obvious to one of ordinary skill in the art at the time of the invention to provide multiple pop-up pages, because pop-up presentation is widely used and allows user to view different windows at the same time.

Regarding Claim 16, most of the limitations have been met in the rejection of Claim 15. See the rejection of Claim 15 for details. Kondo discloses the claimed aspect of playback apparatus, wherein reproducing apparatus is disclosed (FIG. 4, decoder, Track buffer (Column 19, line 11)). The rejection for Claim 4 applies to Claims 16. See rejection details for Claim 4.

Regarding Claims 19 and 21, most of the limitations have been met in the rejection of Claim 18. See the rejection of Claim 18 for details. Kondo discloses the claimed aspect of playback apparatus, wherein reproducing apparatus is disclosed (FIG. 4, decoder, Track buffer (Column 19, line 11)). The rejection for Claims 7 and 9 apply to Claims 19 and 21. See rejection details for Claims 7 and 9.

Regarding Claims 23 and 24, most of the limitations have been met in the rejection of Claim 13. See the rejection of Claim 13 for details. The rejection for Claim 11 applies to Claims 23 and 24. See the rejection details for Claim 11.

Regarding Claim 25, most of the limitations have been met in the rejection of Claim 24. See the rejection of Claim 24 for details. Kondo discloses the claimed aspect of playback apparatus, wherein reproducing apparatus is disclosed (FIG. 4, decoder, Track buffer (Column 19, line 11)). The rejection for Claim 12 applies to Claim 25. See rejection details for Claims 12.

Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being obvious over Kondo, EP 0886276 and Murase, US 5,907, 658.

Regarding Claims 8 and 20, most of the limitations have been met in the rejection of Claim 7. See the rejection of Claim 7 for details. Kondo discloses the claimed aspect of main page includes a plurality of button materials (FIG. 5, 1, 2, 3, 4 and Next); a specific one of the button materials is presented in a selected state (FIG. 5, Next) and the other button materials are presented in a normal state (FIG. 5, 1, 2, 3, 4); the set of uncompressed graphics used for presentation of the main page includes uncompressed graphics obtained by decoding graphics data associated with the selected state of the specific button, and uncompressed graphics obtained by decoding

graphics data associated with the normal state of each of the other buttons, wherein FIG. 5 illustrates background image and uncompressed graphics data.

Also, Murase discloses the claimed aspect of the main page includes a plurality of button materials(Murase, FIG. 1A); a specific one of the button materials is presented in a selected state(FIG. 1A, moving picture 3, 1) and the other button materials are presented in a normal state(FIG. 1A, moving picture 3, 1, 2); the set of uncompressed graphics used for presentation of the main page includes uncompressed graphics obtained by decoding graphics data associated with the selected state of the specific button, and uncompressed graphics obtained by decoding graphics data associated with the normal state of each of the other buttons, wherein FIG. 1A, 1 is selected related image is decoded and displayed.

Applicant should duly note that it would be obvious to one of ordinary skill in the art at the time of the invention to calculate transfer duration by dividing a total size of the set of uncompressed graphics by a transfer rate of the playback apparatus, because how long something will take will be determined items to be processed and how fast they are processed. This is a general mathematical concept.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Saeki, et al., EP0886276, 03/1997, "Multimedia optical disc having improved interactive reproduction procedure, a reproduction apparatus and method for such a disc".

2) Setogawa, et al., EP0898279, 02/1999, "Recording Medium and Menu Control".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ECE HUR whose telephone number is (571) 270-1972. The examiner can normally be reached on MONDAY-THURSDAY 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WEILUN LO can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number:
10/577,968
Art Unit: 2179

Page 17

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February 7, 2008

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PRIMARY EXAMINER